

Vortragsveranstaltung für Landwirte und Tierärzte 16.11.22 Magdeburg

# Management festliegender Rinder

Dr. Theresa Scheu, Fachtierärztin für Rinder  
Lehr- und Versuchsanstalt für Viehhaltung Hofgut  
Neumühle

# Definition

Festliegend: Unfähig ohne Hilfe zu stehen / aufzustehen

## **Primäre Ursachen:**

Hypocalcämie, schwere toxische Mastitis, Ausgrätschen, Darmverschluss, etc.

## **Sekundäre Ursachen:**

Dekubitus (Muskeln und Nerven → Kompartiment-Syndrom) und /oder Verletzungen nach Aufstehversuchen

# Definition

„Downer Cow“: ist (soweit) von der primären Ursache das Festliegens genesen, kann aber nach 24 h – 48 h noch immer nicht aufstehen (Fürl & Sattler 2002, Poulton 2016 Dairy Australia).

Oder: Liegt ohne Diagnose fest.

(Fenwick 1969, Cox 1982)

Prävalenz: ~ 1 -2 %

# Herausforderung

## Diagnose

**Aufstallung** (rutschfest, bequem, witterungsunabhängig, sicher.....)

**Pflege** (Zeit, Sachkunde, Psyche, Ressourcen....)

**Aufrichtung** (Klammer, Gurte, Gestelle, Wassertanks...)

## Prognose

# Herausforderung

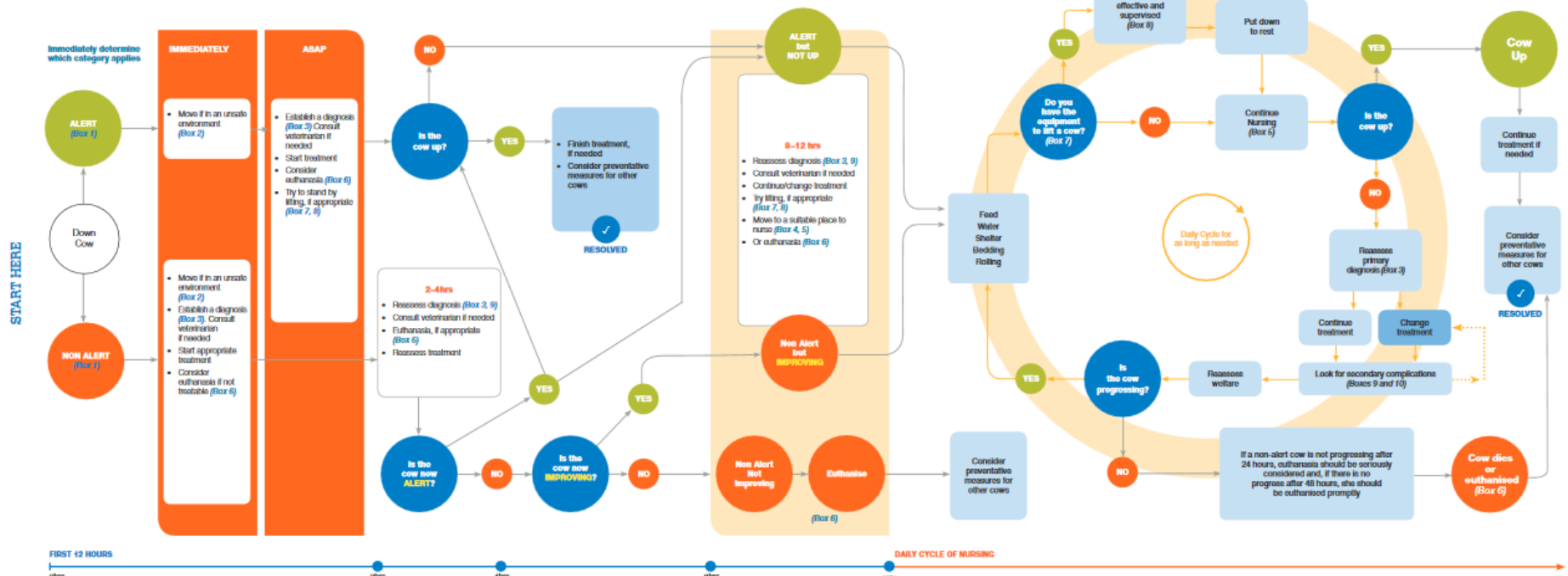
## Diagnose

**Aufstallung** (rutschfest, bequem, witterungsunabhängig, sicher.....)

**Pflege** (Zeit, Sachkunde, Psyche, Ressourcen....)

**Aufrichtung** (Klammer, Gurte, Gestelle, Wassertanks...)

## Prognose



1. DETERMINE COW'S CONDITION	2. UNSAFE LOCATION	3. WHY IS THE COW DOWN?	4. MOVING DOWN COWS	5. WHAT YOU NEED TO NURSE A DOWN COW	6. WHEN TO EUTHANISE	7. LIFTING OP	8. COMPLICATIONS	10. ALERT TO NON ALERT
<p><b>ALERT</b></p> <ul style="list-style-type: none"> <li>Bright, alert and responsive</li> </ul> <p><b>NOT ALERT</b></p> <ul style="list-style-type: none"> <li>Dull, depressed and not responsive</li> </ul>	<ul style="list-style-type: none"> <li>Hard surface, especially concrete or gravel</li> <li>On slope with head downhill</li> <li>Lying on side, particularly if bloated</li> <li>Excess cold or heat</li> <li>Location is dangerous e.g. under an electric fence, edge of a creek or dam or in a laneway</li> </ul>	<p><b>ALERT</b></p> <ul style="list-style-type: none"> <li>Pregnancy toxemia</li> <li>Nerve damage to the spine or one of the legs e.g. back injury or calving paralysis</li> <li>Dislocated hip</li> <li>Insufficiently treated milk fever</li> <li>Fracture of legs, pelvis or back</li> <li>Calving</li> <li>Cast</li> </ul> <p><b>NOT ALERT</b></p> <ul style="list-style-type: none"> <li>Milk fever</li> <li>Grass tetany</li> <li>Very severe mastitis</li> <li>Very severe illness</li> <li>Severe blood loss</li> <li>Nitrate poisoning</li> </ul>	<p>Down cows need to be moved in a way that avoids causing further damage to them.</p> <p>They can be moved safely by:</p> <ul style="list-style-type: none"> <li>Rolling onto a carry-all and tying them securely</li> <li>Rolling them into a trough and loading "bushies" ensuring their head is tied in a safe position</li> <li>Carrying them in a sling or in the Upside-Daisy Cow Lifter</li> <li>Lifting them by a hip clamp or pelvic lifter but only with a slip under their chest</li> </ul> <p>If there is no alternative, down cows can be moved over a very short distance by pulling on a halter around their head. Avoid any jerking movements and do not drag by pulling on legs</p>	<ul style="list-style-type: none"> <li>TLC (pender, loving care)</li> <li>Adequate labour</li> <li>Suitable shelter site that is conveniently located to allow regular monitoring</li> <li>Deep soft bedding of hay/straw/sawdust/sand</li> <li>Equipment to keep the area clean</li> <li>Barriers to confine cows on suitable bedding and to prevent crowding</li> <li>Ability to regularly roll the cow if it does not alternate the leg it is sitting on</li> </ul>	<ul style="list-style-type: none"> <li>Incurable condition e.g. fractured bones</li> <li>Non alert cow not responding within a suitable time</li> <li>Not eating</li> <li>Always lying on her side</li> <li>Pain that is not responding to treatment</li> <li>Farmer is unable to nurse adequately</li> <li>Complications that cannot be dealt with adequately e.g. pressure sores</li> <li>Deterioration despite adequate treatment</li> </ul> <p>When a decision is made to euthanise an animal, it should happen as soon as possible.</p>	<p><b>Hip Clamps</b></p> <ul style="list-style-type: none"> <li>Best if they are placed before the cow is down</li> <li>Easy to use but can cause damage if used inappropriately</li> </ul> <p><b>Pelvic Lifter</b></p> <ul style="list-style-type: none"> <li>Hip clamp component that fits under the cow</li> <li>Easy to use, but can cause damage if used with extra support</li> </ul> <p><b>Slings</b></p> <ul style="list-style-type: none"> <li>Sling with straps which are used to lift the cow</li> <li>There is a risk of straps cut into the cow</li> </ul> <p><b>Mobile Stretcher</b></p> <ul style="list-style-type: none"> <li>Stretcher on wheels which supports the cow</li> <li>Can produce pressure sores if used for too long</li> </ul> <p><b>Flotation Tanks</b></p> <ul style="list-style-type: none"> <li>Designed to allow unrestrained in water</li> <li>Leave cow in for up to 10 minutes at a time</li> </ul> <p><b>Upside-Daisy Cow Lifter</b></p> <ul style="list-style-type: none"> <li>A metal chair to be used with a chisel</li> </ul>	<p>Relocated hip Muscle damage Nerve damage Pressure sores Respiratory distress Infection and damaged joints Heart stress or hypothermia Skin lesions Depression</p>	<p>If an "Alert Down" becomes a "Non Alert Down" the prospects for survival are poor and euthanasia is usually required.</p>



## Phil Poulton

BVSc (Hons) PhD





**Tempo  
Diagnose  
Aufstallung  
Pflege  
Psyche (Kuh)**

**unverzöglich**

The following principles apply to the management of all down cows, whatever the cause:

- > check the cow's environment
- > determine the cause (get a diagnosis) immediately
- > treat the problem appropriately and promptly – early treatment promotes early recovery
- > if possible, get her back on her feet quickly to avoid secondary damage
- > if her chances of recovery are low, arrange for the cow to be humanely destroyed on site without delay.

**so bald als möglich**

FIRST 12 HOURS

**12 Stunden**

1. DETERMINE COW'S CONDITION	2. UNSAFE LOCATION	3. WHY IS THE COW DOWN?	4. MOVING DOWN COWS	5. WHAT YOU NEED TO NURSE A DOWN COW	6. WHEN TO EUTHANASE	7. LIFTING OPTIONS
<p><b>ALERT</b></p> <ul style="list-style-type: none"> <li>Bright, alert and responsive</li> </ul> <p><b>NOT ALERT</b></p> <ul style="list-style-type: none"> <li>Dull, depressed and not responsive</li> </ul>	<ul style="list-style-type: none"> <li>Hard surface, especially concrete or gravel</li> <li>On slope with head downhill</li> <li>Lying on side, particularly if bloated</li> <li>Excess cold or heat</li> <li>Location is dangerous e.g. under an electric fence, edge of a creek or dam or in a laneway</li> </ul>	<p><b>ALERT</b></p> <ul style="list-style-type: none"> <li>Pregnancy</li> <li>Nerve damage</li> <li>Dislocated hip</li> <li>Insufficiently treated milk fever</li> <li>Fracture of legs, pelvis or back</li> <li>Calving</li> <li>Cast</li> </ul> <p><b>NOT ALERT</b></p> <ul style="list-style-type: none"> <li>Milk fever</li> <li>Grass tetany</li> <li>Very severe mastitis</li> <li>Very severe illness</li> <li>Severe blood loss</li> <li>Nitrate poisoning</li> </ul>	<ul style="list-style-type: none"> <li>Holding onto a carry-all and lying them securely</li> <li>Holding them into a front-end loading "bucket" ensuring their head is tied in a safe position</li> <li>Carrying them in a sling or in the Upside-Down Cow Lifter</li> <li>Lifting them by a hip clamp or pelvic after but only with a slip under their chest</li> <li>If there is no alternative, down cows can be moved over a very short distance by pulling on a halter around their head. Avoid any jerking movements and do not drag by pulling on legs</li> </ul>	<ul style="list-style-type: none"> <li>TLC (tender, loving care)</li> <li>Adequate labour</li> <li>Suitable shelter site that is conveniently located to allow regular monitoring</li> <li>Deep soft bedding of hay/straw/sawdust/sand</li> <li>Equipment to keep the area clean</li> <li>Barriers to confine cows on suitable bedding and to prevent crowding</li> <li>Ability to regularly roll the cow if it does not alternate the leg it is sitting on</li> </ul>	<ul style="list-style-type: none"> <li>Incurable condition e.g. fractured bones</li> <li>Non alert cow not responding within a suitable time</li> <li>Not eating</li> <li>Always lying on her side</li> <li>Pain that is not responding to treatment</li> <li>Farmer is unable to nurse adequately</li> <li>Complications that cannot be dealt with adequately e.g. pressure sores</li> <li>Deterioration despite adequate treatment</li> </ul> <p><i>When a decision is made to euthanase an animal, it should happen as soon as possible.</i></p>	<p><b>Hip Clamps</b></p> <ul style="list-style-type: none"> <li>Best if they are padded to minimise damage to the hips</li> <li>Easy to use but only fits the hind quarters and can injure cows if used inappropriately</li> </ul> <p><b>Pelvic Lifter</b></p> <ul style="list-style-type: none"> <li>Hip clamp combined with a seat that fits under the pelvis</li> <li>Easy to use, like Hip Clamps but with extra support for the pelvis</li> </ul> <p><b>Slings</b></p> <ul style="list-style-type: none"> <li>Sling with straps to support the whole animal</li> <li>There is a risk of pressure sores if straps cut into the groin</li> </ul> <p><b>Mobile Stretcher</b></p> <ul style="list-style-type: none"> <li>Stretcher on wheels, which supports the whole animal</li> <li>Can produce pressure sores if left on for too long</li> </ul> <p><b>Flotation Tanks</b></p> <ul style="list-style-type: none"> <li>Designed to allow cow to stand unrestrained in warm water</li> <li>Leave cow in for up to 8-12 hours at a time</li> </ul> <p><b>Upside-Down Cow Lifter</b></p> <ul style="list-style-type: none"> <li>A metal chair to support the rear end with a chisel chole for the front</li> </ul>

# Grundsätze des Managements – unabhängig von der Ursache

The following principles apply to the management of all down cows, whatever the cause:

- › check the cow's environment
- › determine the cause (get a diagnosis) immediately
- › treat the problem appropriately and promptly – early treatment promotes early recovery
- › if possible, get her back on her feet quickly to avoid secondary damage
- › if her chances of recovery are low, arrange for the cow to be humanely destroyed on site without delay.

## unverzüglich

- Umgebung überprüfen
- Diagnose so schnell wie möglich
- Effektive und schnelle Behandlung

## so bald als möglich

- Alsbald Aufstehversuche initiieren (Anheben)
- Bei schlechter Prognose – zügige Entscheidung (Euthanasie /Schlachtung)

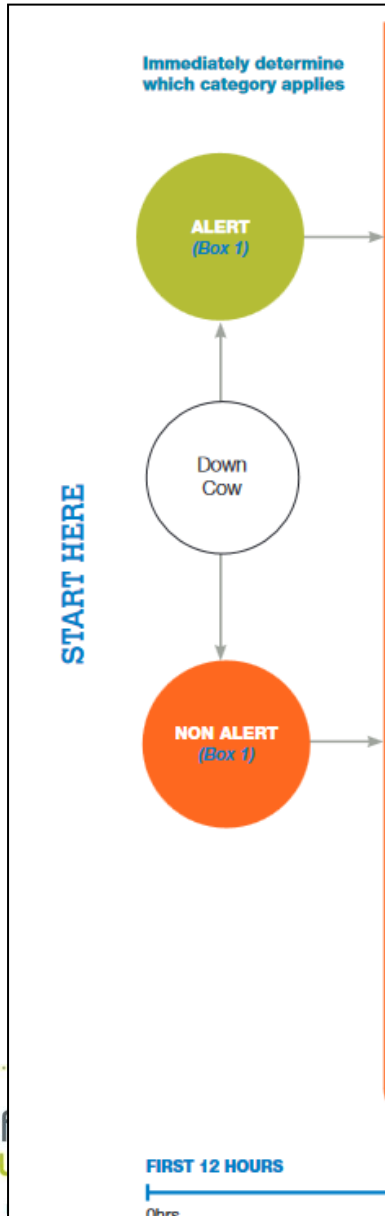


# Management - Festlieger

## Unmittelbare Entscheidung bei Auffinden des Tieres

munter, ansprechbar, aufmerksam,  
ungetrübtes Sensorium

matt, schwer ansprechbar, apathisch,  
getrübtes Sensorium

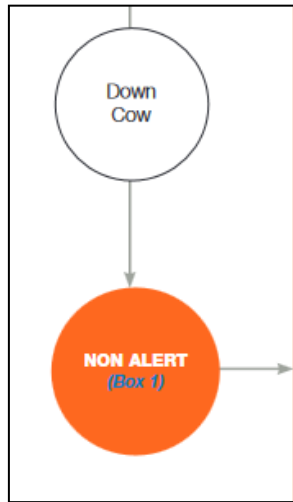


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# Management - Festlieger

## Unmittelbare Entscheidung bei Auffinden des Tieres

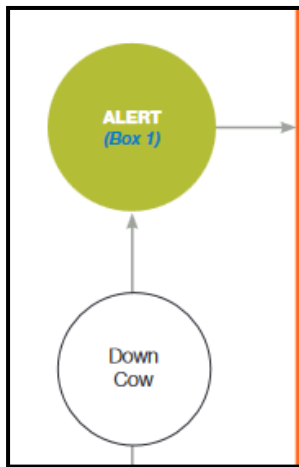


matt, schwer ansprechbar, apathisch,  
getrübtes Sensorium

**Sofortige Hilfe / Versorgung unbedingt notwendig!**

# Management - Festlieger

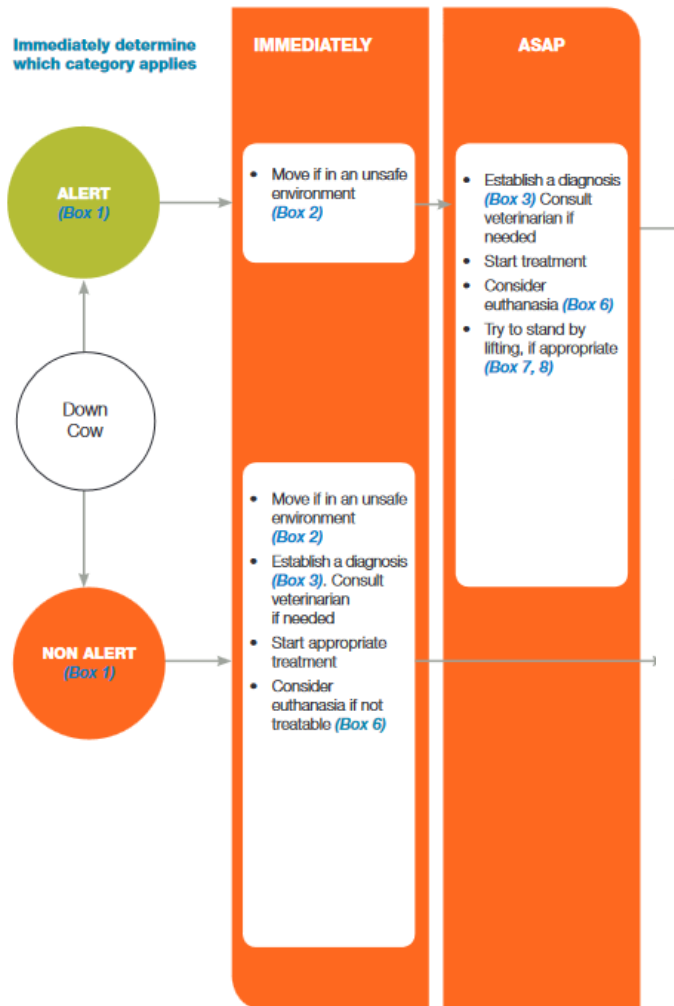
## Unmittelbare Entscheidung bei Auffinden des Tieres



munter, ansprechbar, aufmerksam,  
ungetrübtes Sensorium

**zügige Hilfe / Versorgung angeraten**

# Management - Festlieger



**anschließende Handlung nach Auffinden des Tieres**  
(so schnell wie möglich – alsbald - zügig)

- Tier aus ungünstiger Umgebung herausnehmen
- Tierarzt hinzuziehen → Diagnose und Prognose
- ggf. Behandlung starten
- ggf. Aufhebeversuch
- ggf. über Tötung / Euthanasie nachdenken

FIRST 12 HOURS

0hrs

2hrs

neumühle

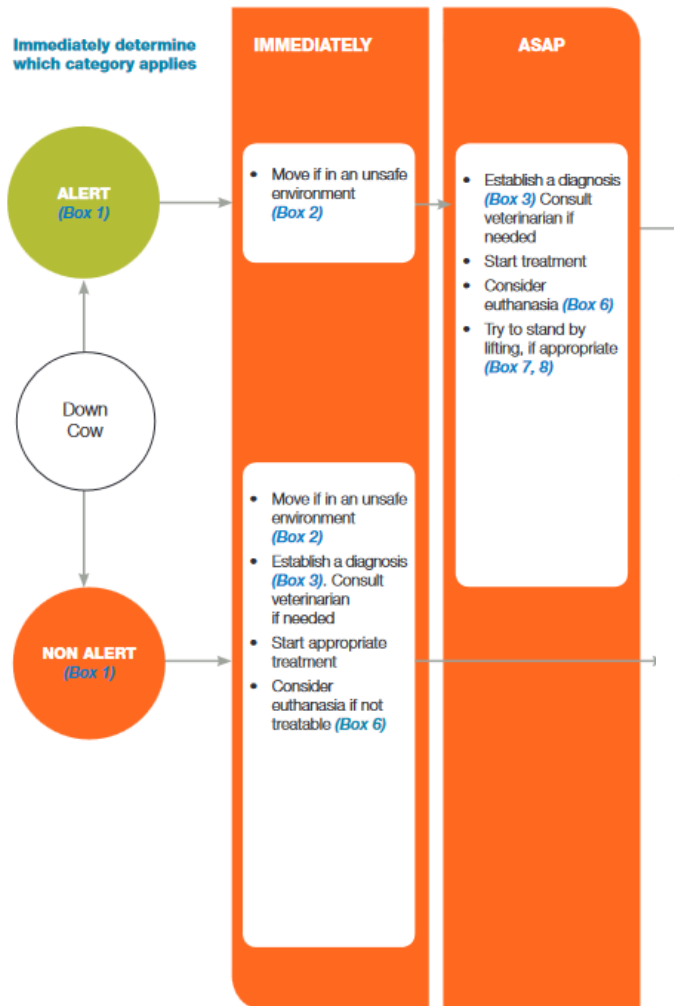
Kompetenz in  
landwirtschaftlicher  
Tierhaltung



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# Management - Festlieger



anschließende Handlung nach Auffinden des Tieres  
(Innerhalb von 2 Stunden)

Tier aus ungünstiger Umgebung herausnehmen  
/ Euthanasie nachdenken  
**Ideal: gemeinsam mit dem Tierarzt**

- rutschiger und harter Untergrund
- im Tierverkehr (Treibgang / Melkstand)
- bergab
- auf der Seite, eventuell gebläht  
→ in Brust-Bauch-Lage bringen
- in der Hitze / Kälte
- unter Gatter / Elektrozaun

FIRST 12 HOURS

0hrs

2hrs

neumühle

Kompetenz in  
landwirtschaftlicher  
Tierhaltung



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# Sekundäre Schäden

## Importance of secondary damage in downer cows

Poulton et. Al. 2016

Australian Veterinary journal

218 Kühe engmaschig begleitet

→ 183 (84 %) hatten sekundäre Schäden

→ für 173 Tiere (79%) waren diese Schäden klinisch relevant

149 Tiere mussten letztlich eingeschläfert

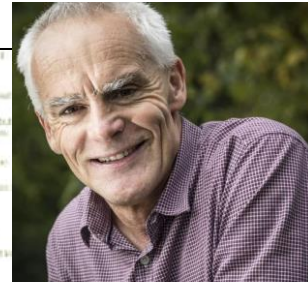
→ 107 (72 %) aufgrund sekundärer Schäden



START HERE

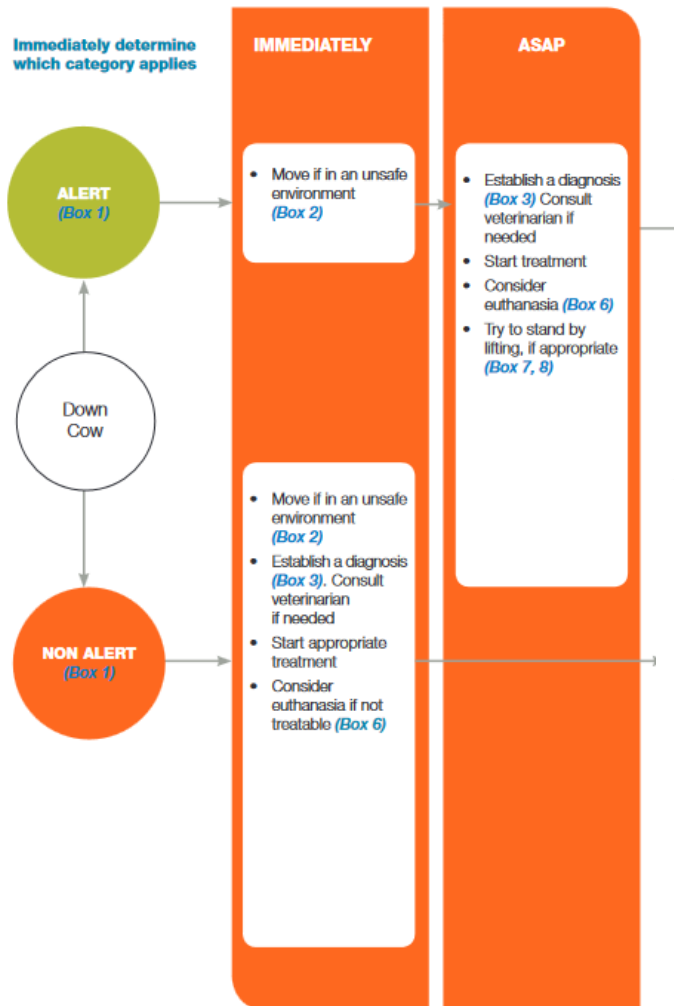
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4. ID  
5. ID

- Lack depressed animal response
- High or erratic, persistently elevated
- Excess cold or heat
- Cattle in a line or group under an electric fence, edge of a creek or dam or in a line
- Unusually quiet
- Involuntarily treated milk cow
- Fracture of legs, joints or back
- Calfing
- Calf
- NOT ALERT
- Milk shed
- Grass livery
- Very soiled paddock
- Very soiled areas
- Cattle blocked
- Miscalculation
- Holding onto a variety of and lying from necessity
- Holding them in a line and overexposed "back" to sun or rain in a risky position
- Cramming them in a cage or in the Upst Dairy Cow Effort
- Lifting them by a hip clamp or pole, after a fall only with a sling under their chest
- If there is no alternative, downer cows can be moved over a very short distance by pulling on a trailer attached to the head. Avoid any jolting movements and do not drag by pulling on legs
- Consistently refused to show regular movement
- Drop-off bedding or hay/straw (avoid) (avoid)
- Equipment to keep the animal clean
- Methods to control cows on pasture feeding and to prevent crowding
- Ability to separate out the cow if it does not otherwise bring it to sticking on
- Not riding
- Always lying on her side
- Flank that is not responding to treatment
- Horns is unable to raise adequately
- Complications that cannot be dealt with using existing resources
- Unmanageable despite safe treatment
- When a decision is made to euthanase an animal, it should happen as soon as possible
- Quarters and care given cows is not appropriate
- Hip clamps cannot be used with a cow that lies under the jaw
- Easy to use. The Hip Clamps will not fully support the pelvic
- They will slip, to support the pelvic area
- There is a risk of pressure sores slipping out into the grass
- Stroker on wheels, which is gentle on the whole animal
- One person pressure needed for the stroking
- Designed to allow cow to stand unassisted in water while
- Lower cow is to up to 10 minutes at a time
- A metal chair to support the rear end with a third chair to the rear



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# Management - Festlieger



anschließende Handlung nach Auffinden des Tieres  
(Innerhalb von 2 Stunden)

- Tier aus ungünstiger Umgebung herausnehmen
- Tierarzt hinzuziehen → Diagnose und Prognose
- ggf. Behandlung starten
- ggf. Aufhebeversuch
- ggf. über Tötung / Euthanasie nachdenken

# Management - Festlieger

## 3. WHY IS THE COW DOWN?

### ALERT

- Pregnancy toxaemia.
- Nerve damage to the spine or one of the legs e.g. back injury or calving paralysis
- Dislocated hip
- Insufficiently treated milk fever
- Fracture of legs, pelvis or back
- Calving
- Cast

### NOT ALERT

- Milk fever
- Grass tetany
- Very severe mastitis
- Very severe illness
- Severe blood loss
- Nitrate poisoning

anschließende Handlung nach Auffinden des Tieres  
(Innerhalb von 2 Stunden)

- Tier aus ungünstiger Umgebung herausnehmen
- **Tierarzt hinzuziehen → Diagnose und Prognose → Prof. Starke**
- ggf. Behandlung starten
- ggf. Aufhebeversuch
- ggf. über Tötung / Euthanasie nachdenken

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landwirtschaftlicher  
Tierhaltung

2hr

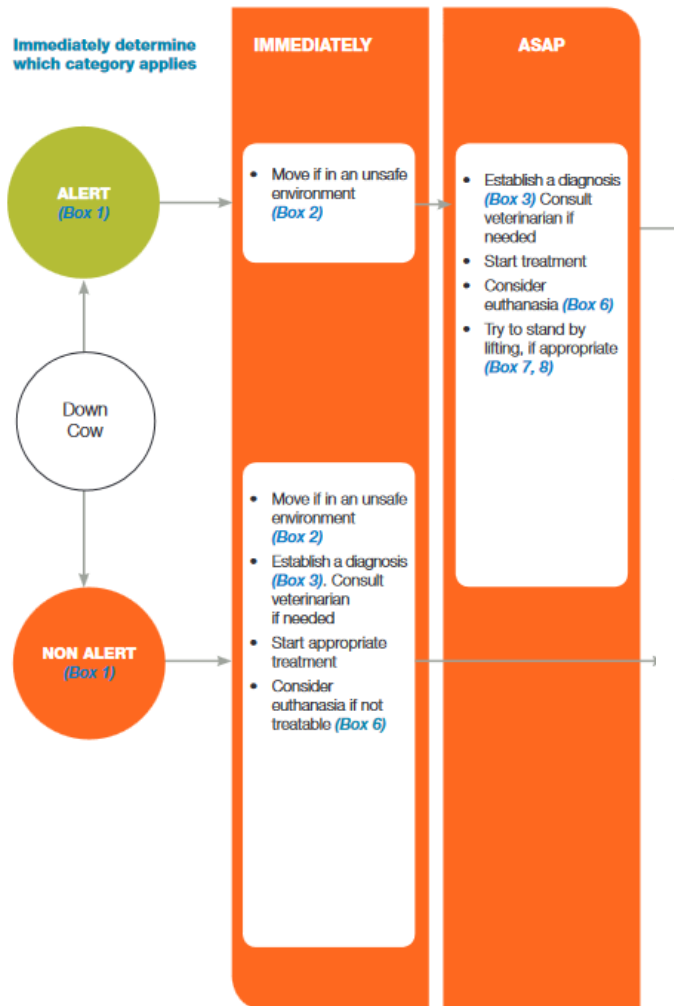


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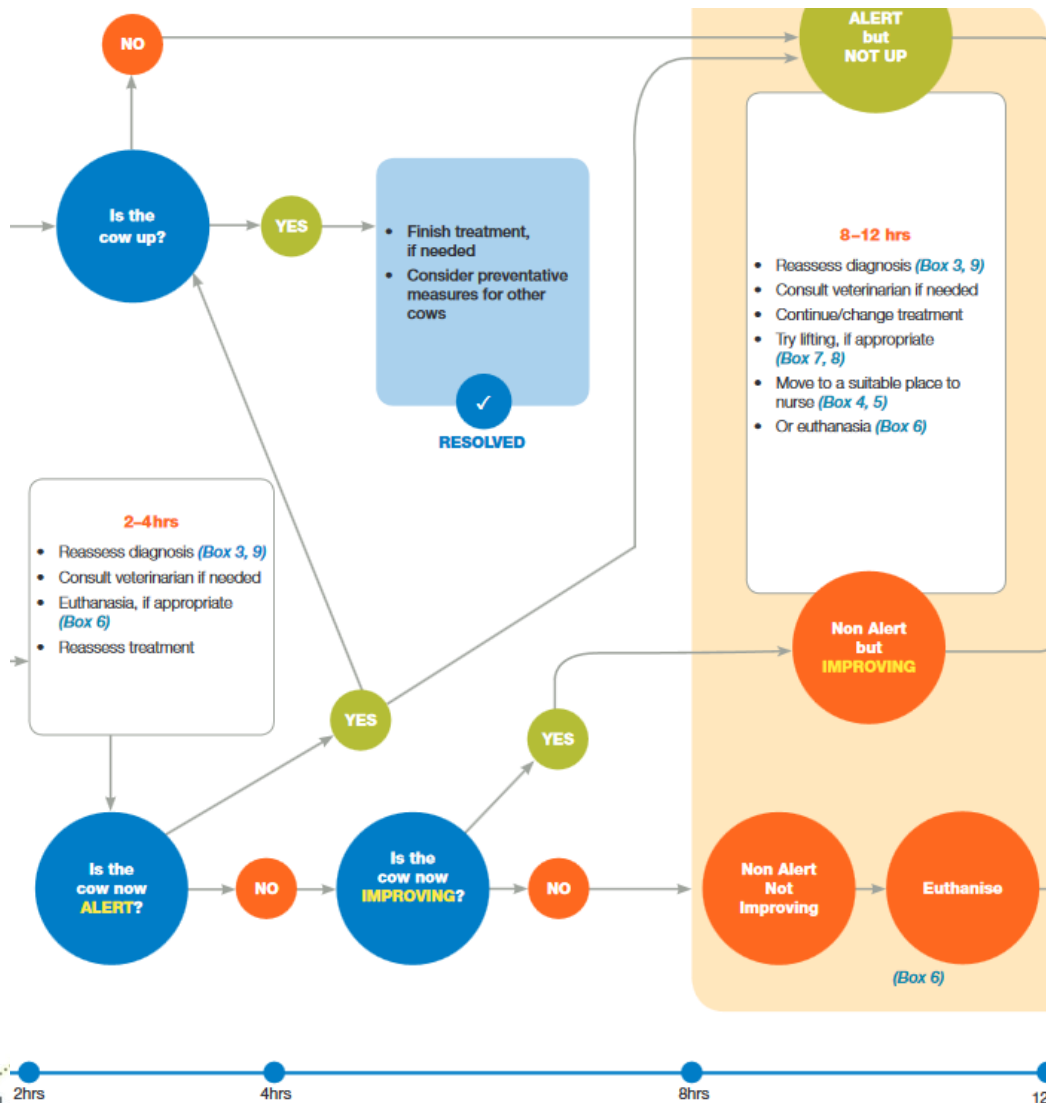
# Management - Festlieger



anschließende Handlung nach Auffinden des Tieres  
(Innerhalb von 2 Stunden)

- Tier aus ungünstiger Umgebung herausnehmen
- Tierarzt hinzuziehen → Diagnose und Prognose
- ggf. Behandlung starten
- ggf. Aufhebeversuch
- **ggf. über Tötung / Euthanasie nachdenken**  
→ Notschlachtung möglich?!

# Management - Festlieger



Entwicklung des Tieren in den nächsten Stunden

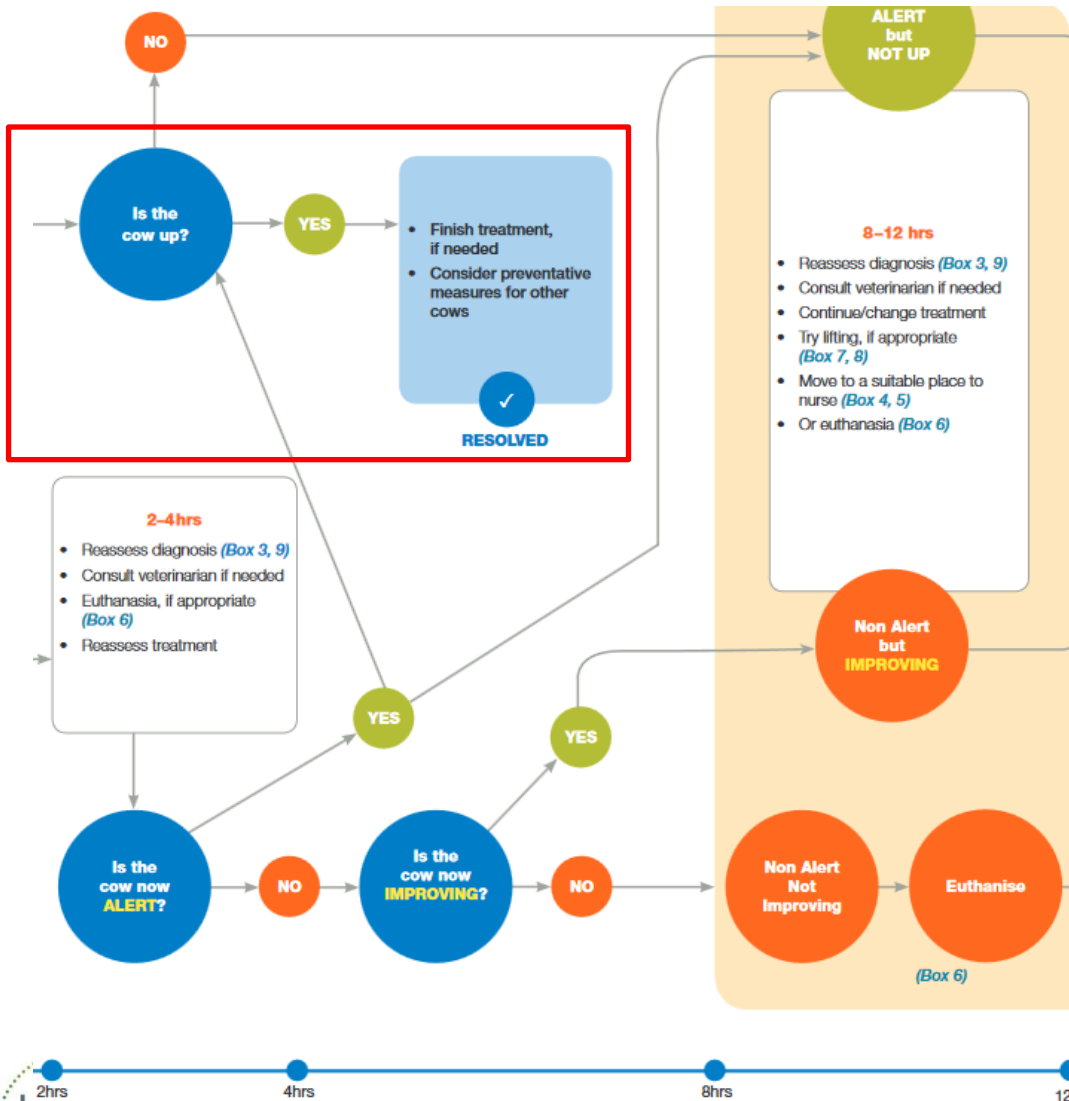
Mehrere Szenarien denkbar:

Wichtig! Engmaschige Überwachung

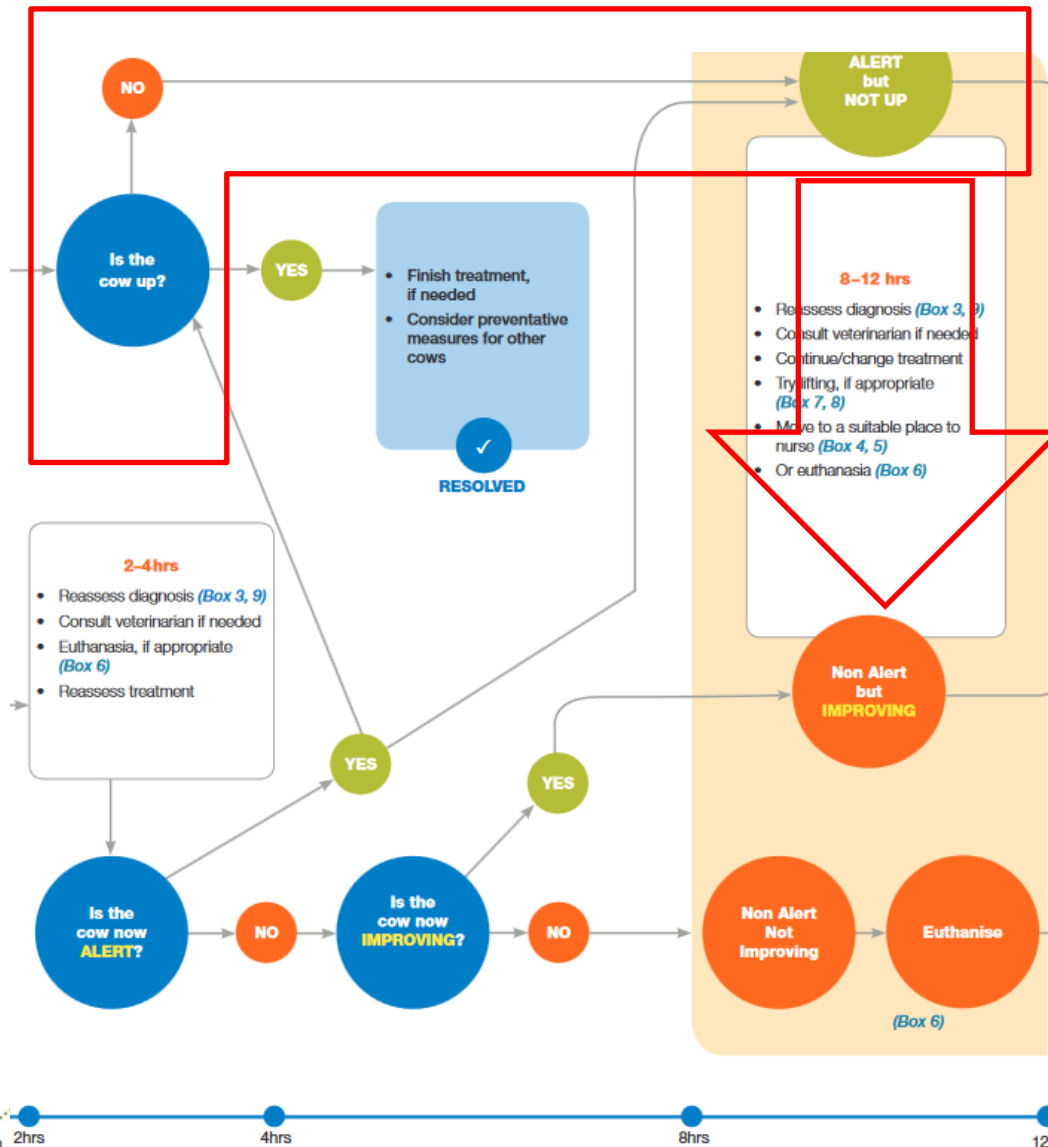
# Management - Festlieger

Entwicklung des Tieren in den nächsten Stunden

Szenario 1:  
Behandlung erfolgreich



# Management - Festlieger



Entwicklung des Tieren in den nächsten Stunden

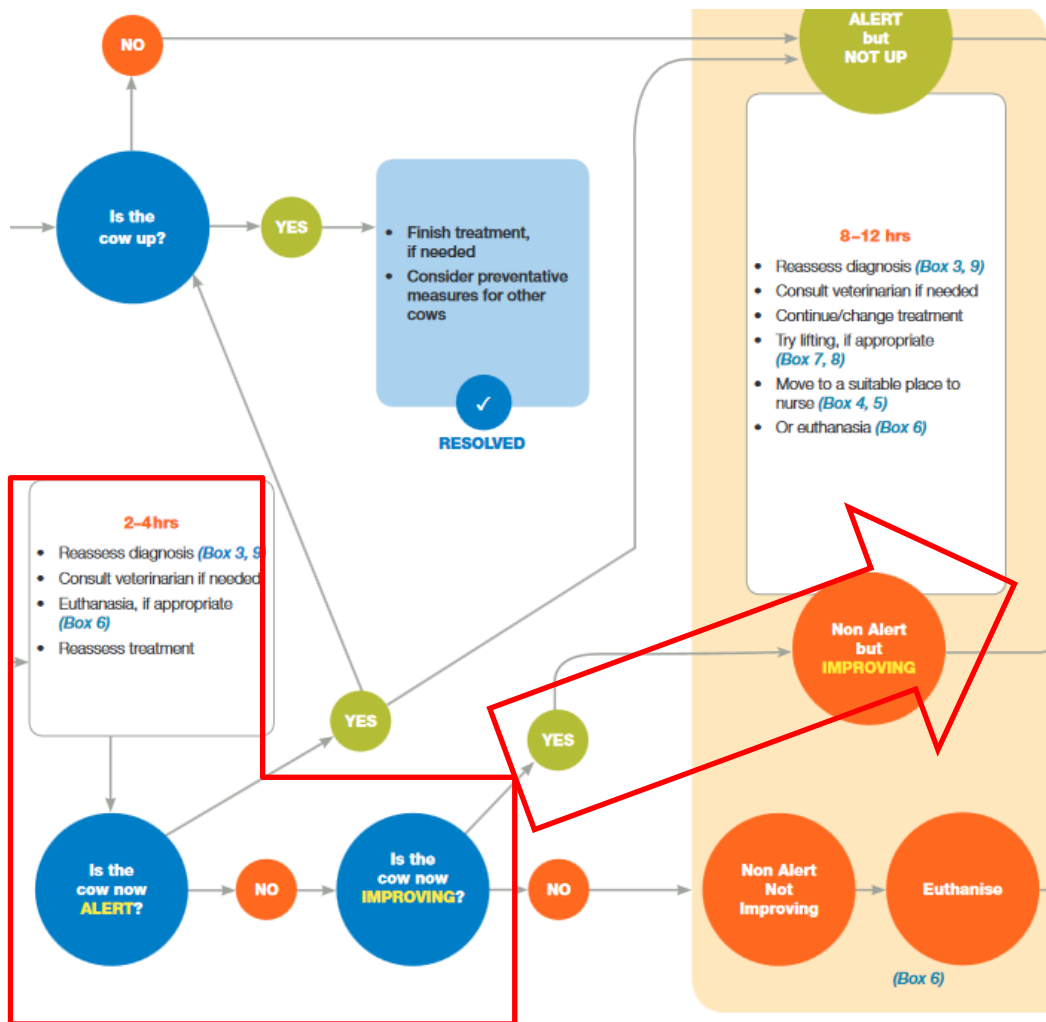
Szenario 2:

Kuh wurde aus unsicherer Umgebung geholt und behandelt

→ Zustand bessert sich zunächst nicht

→ Erneute Untersuchung und Neubewertung der Situation

# Management - Festlieger



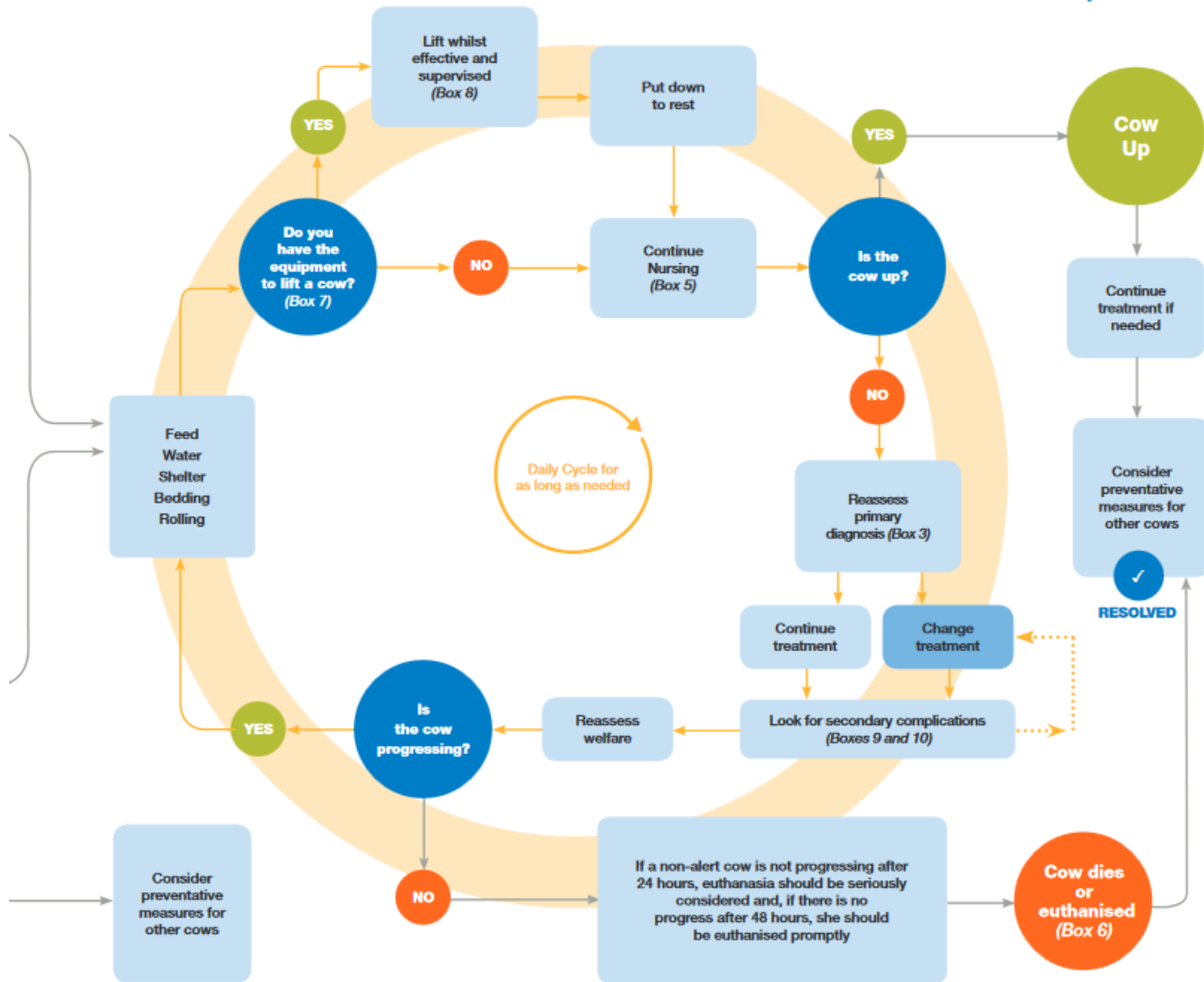
Entwicklung des Tieren in den nächsten Stunden

Szenario 3:

Kuh mit getrübttem Sensorium, apathisch, matt  
Behandlung eingeleitet

→ Zustand bessert sich zunächst nicht (Im Bezug auf Stehfähigkeit ohne Hilfe)

# Management - Festlieger



Entwicklung des Tieren in den nächsten Tagen

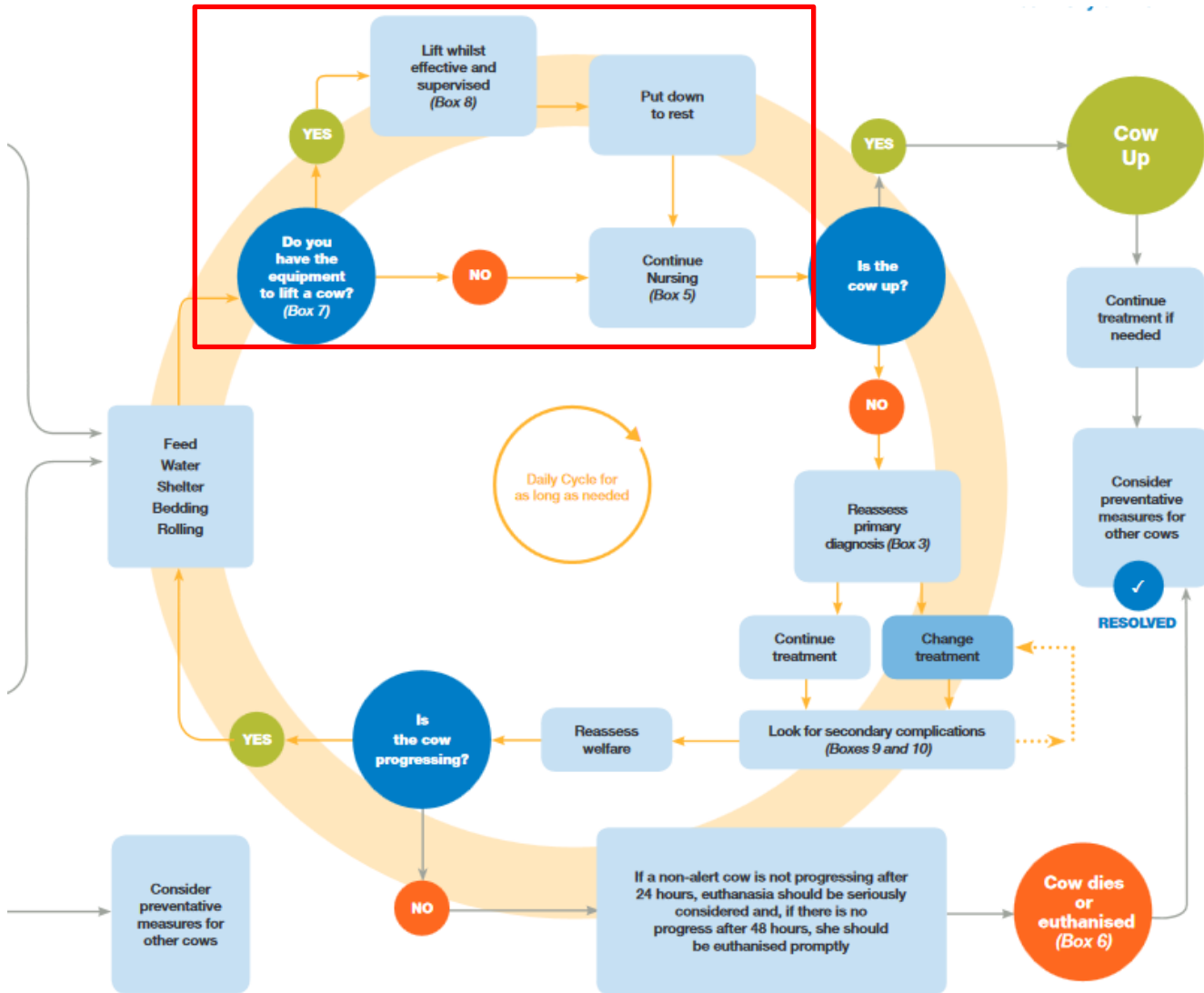
Entscheidend hier:

**PFLEGE!**

Abhängig von:  
Aufstallung,  
Ressourcen,  
Komplikationen,  
der Kuh,  
Etc.

DAILY CYCLE OF NURSING

# Management - Festlieger



Entwicklung des Tieren in den nächsten Tagen

Entscheidend hier:

**PFLEGE!**

Abhängig von:  
Aufstallung,  
Ressourcen,  
Komplikationen,  
der Kuh,  
Etc.

DAILY CYCLE OF NURSING

# Aufhebeversuche! → Neueinschätzung der Situation



**Kuh NIEMALS im Hebegeschirr/Klammer hängen lassen!**



# Die 3 wichtigsten Aspekte

The three most important aspects of nursing were considered to be the provision of:

**accessible feed and water,**  
**regular turning and lifting,**  
and **deep, soft bedding** with good  
footing



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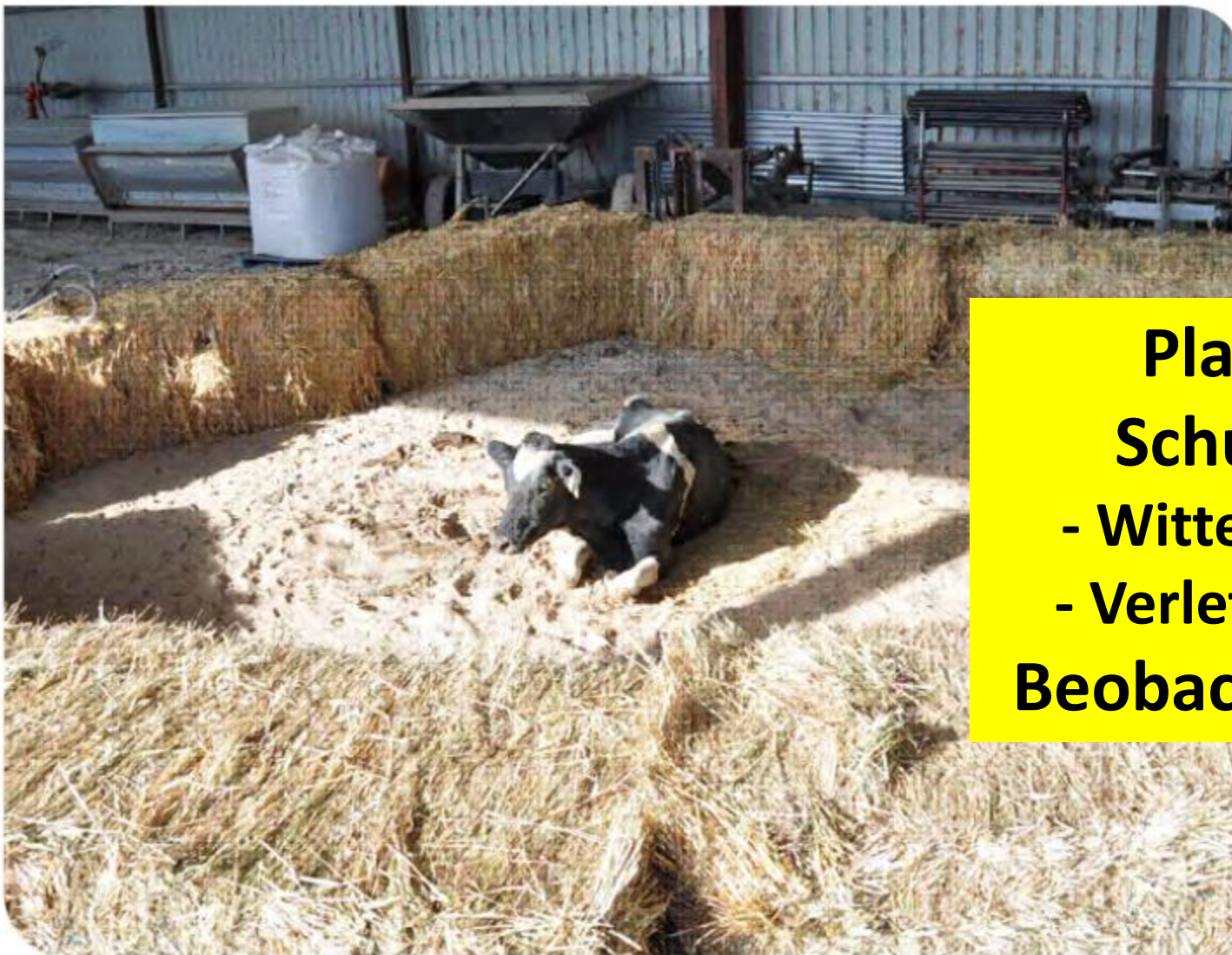
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# Krankenbucht Spezial - Festlieger

**Platz**  
**Schutz**  
**- Witterung**  
**- Verletzung**  
**Beobachtung**



# Krankenbucht Spezial - Festlieger



**Platz**  
**Schutz**  
**- Witterung**  
**- Verletzung**  
**Beobachtung**

# Krankenbucht

Pflegebedürftige Rinder:

- brauchen ungehinderten Zugang zu **Wasser und Futter** (die Abwehr anderer Tiere ist eingeschränkt)



# Krankenbucht

Pflegebedürftige Rinder:

- eine **weiche Liegefläche** zur Vermeidung von Dekubitus  
**Rutschfestigkeit für Aufstehversuche!**



# Krankenbucht

Pflegebedürftige Rinder:

- Gerade Kälber haben einen **erhöhten Wärmebedarf**, weil Futteraufnahme/Bewegung reduziert sind.



# Krankenbucht - Pflege

Alle 2 -3 Stunden wenden! - Zum Aufstehen motivieren - Ausstrippen!



# Umgang mit kranken und verletzten Tieren

Leitende Fragen für Landwirt und Tierarzt:



„Besteht eine **realistische Chance**, dass das Rind **soweit geheilt** werden kann, dass die **Lebensqualität** nicht durch anhaltende erhebliche Schmerzen oder Leiden beeinträchtigt und die **vorgesehene Nutzung** des Tieres innerhalb eines angemessenen Zeitraums wieder möglich ist (Schlachtung/Reproduktion)?

Sind die mit der Erkrankung/Verletzung einhergehenden **Schmerzen und/oder Leiden dem Tier zuzumuten** resp. durch eine (weitere) Behandlung **wirksam zu reduzieren**?

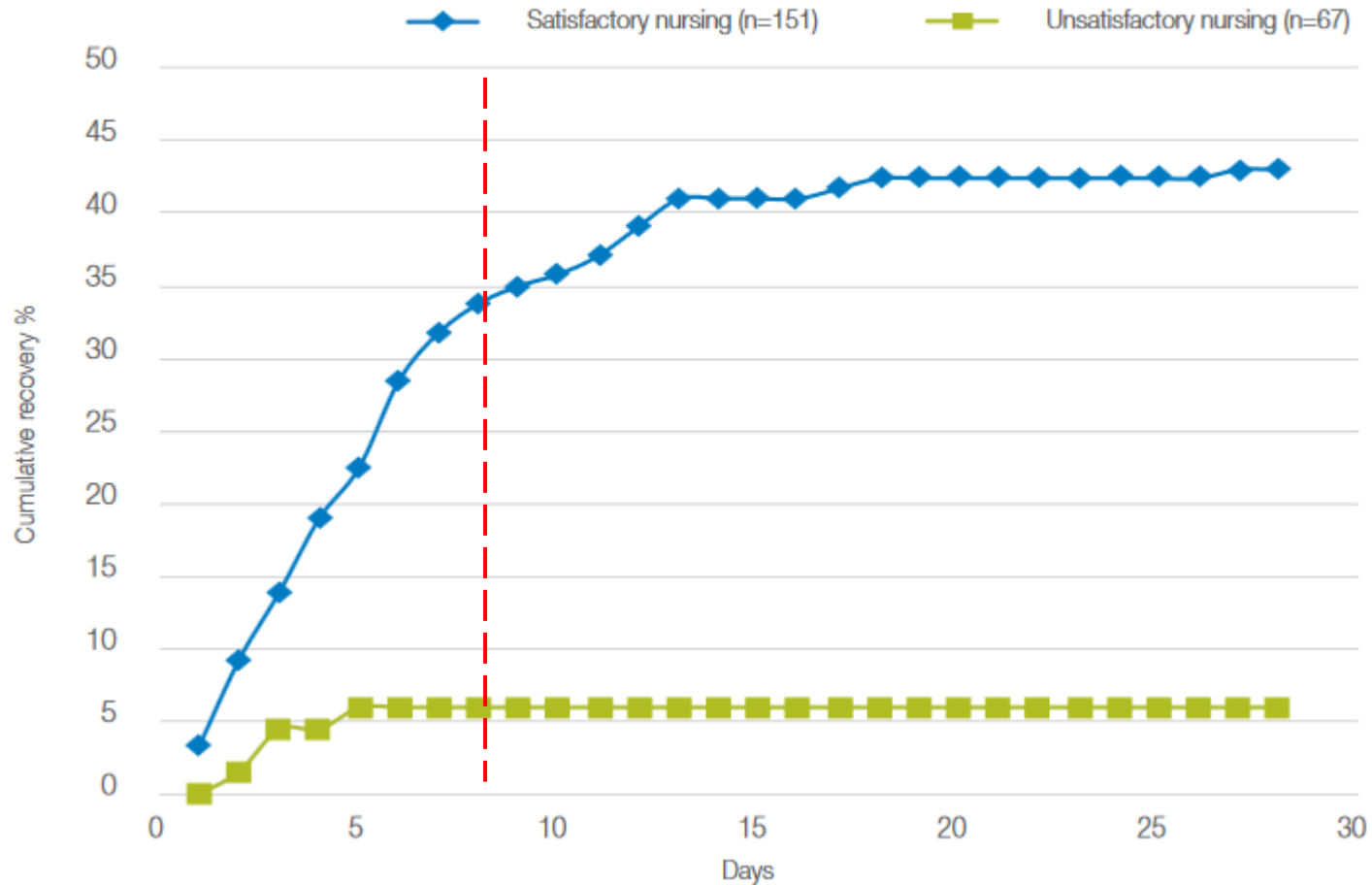


Sind die Behandlungs- und Pflegemaßnahmen **dem Tierhalter zuzumuten**?“



# Krankenbucht Spezial - Festlieger

**Figure 1** Daily cumulative recovery percentage by nursing quality for 218 downer cows



# Umgang mit kranken und verletzten Tieren - Tötung

← Therapie		Nottötung →
Ja	Fresslust	Nein
Ja	Tränkeaufnahme	Nein
Ja	Aufstehversuche	Nein
Ja	Selbstständiges Umlagern	Nein
Ja	Keine abnorme Körperhaltung	Nein
Ja	Allgemeinverhalten ungestört	Nein
Ja	Innere Körpertemperatur in Norm	Nein
Ja	Kein Anzeichen von Schock/Intoxikation	Nein
Ja	< 5 Tage festliegend	Nein
Ja	Deutliche Verbesserung der labordiagnostischen Parameter	Nein

Abb. 1: Entscheidungshilfe zur Nottötung bei festliegenden Rindern (Quellenangaben im Text) / Decision support for emergency killing of

Khol et al. 2015

# Down cow decision tree

# Fazit



Tempo  
Diagnose  
Aufstallung  
Pflege  
Psyche (Kuh und Pfleger)

1. DETERMINE COW'S CONDITION	2. UNSAFE LOCATION	3. WHY IS THE COW DOWN?	4. MOVING DOWN COWS	5. WHAT YOU NEED TO NURSE A DOWN COW	6. WHEN TO EUTHANISE	7. LIFTING OPTIONS	8. LIFTING GUIDELINES	9. COMPLICATIONS	10. ALERT TO NON ALERT
<p><b>ALERT</b></p> <ul style="list-style-type: none"> <li>Bright, alert and responsive</li> </ul> <p><b>NOT ALERT</b></p> <ul style="list-style-type: none"> <li>Dull, depressed and not responsive</li> </ul>	<ul style="list-style-type: none"> <li>Hard surface, especially concrete or gravel</li> <li>On slope with head downhill</li> <li>Lying on side, particularly if bloated</li> <li>Excess cold or heat</li> <li>Location is dangerous e.g. under an electric fence, edge of a creek or dam or in a laneway</li> </ul>	<p><b>ALERT</b></p> <ul style="list-style-type: none"> <li>Pregnancy toxæmia</li> <li>Nerve damage to the spine or one of the legs e.g. back injury or calving paralysis</li> <li>Dislocated hip</li> <li>Ineffectually treated milk fever</li> <li>Fracture of legs, pelvis or back</li> <li>Calving</li> <li>Cast</li> </ul> <p><b>NOT ALERT</b></p> <ul style="list-style-type: none"> <li>Milk fever</li> <li>Grass tetany</li> <li>Very severe mastitis</li> <li>Very severe illness</li> <li>Severe blood loss</li> <li>Nitrate poisoning</li> </ul>	<p>Down cows need to be moved in a way that avoids causing further damage to them.</p> <p>They can be moved safely by:</p> <ul style="list-style-type: none"> <li>Rolling onto a carry-ail and tying them securely</li> <li>Rolling them into a front-end loading "bucket" ensuring their head is tied in a safe position</li> <li>Carrying them in a sling or in the Upside-Daisy Cow Lifter</li> <li>Lifting them by a hip clamp or pelvic lifter but only with a slip under their chest</li> <li>If there is no alternative, down cows can be moved over a very short distance by pulling on a halter around their head. Avoid any jerking movements and do not drag by pulling on legs</li> </ul>	<ul style="list-style-type: none"> <li>TLC (tender, loving care)</li> <li>Adequate labour</li> <li>Suitable shelter site that is conveniently located to allow regular monitoring</li> <li>Deep soft bedding of hay/straw/sawdust/wood</li> <li>Equipment to keep the area clean</li> <li>Barriers to confine cows on suitable bedding and to prevent crowding</li> <li>Ability to regularly roll the cow if it does not alternate the leg it is sitting on</li> </ul> <p>When a decision is made to euthanise an animal, it should happen as soon as possible.</p>	<ul style="list-style-type: none"> <li>Incurable condition e.g. fractured bones</li> <li>Non alert cow not responding within a suitable time</li> <li>Not eating</li> <li>Always lying on her side</li> <li>Pain that is not responding to treatment</li> <li>Farmer is unable to nurse adequately</li> <li>Complications that cannot be dealt with adequately e.g. pressure sores</li> <li>Deterioration despite adequate treatment</li> </ul>	<p><b>Hip Clamps</b></p> <ul style="list-style-type: none"> <li>Best if they are padded to minimise damage to the hips</li> <li>Easy to use but only fits the hind quarters and can injure cows if used inappropriately</li> </ul> <p><b>Pelvic Lifter</b></p> <ul style="list-style-type: none"> <li>Hip clamp combined with a seat that fits under the pelvis</li> <li>Easy to use, like Hip Clamps but with extra support for the pelvis</li> </ul> <p><b>Slings</b></p> <ul style="list-style-type: none"> <li>Sling with straps to support the whole animal</li> <li>There is a risk of pressure sores if straps cut into the grain</li> </ul> <p><b>Mobile Stretcher</b></p> <ul style="list-style-type: none"> <li>Stretcher on wheels, which supports the whole animal</li> <li>Can produce pressure sores if left on for too long</li> </ul> <p><b>Frontalton Tanks</b></p> <ul style="list-style-type: none"> <li>Designed to allow cow to stand unrestrained in warm water</li> <li>Leave cow in for up to 8-12 hours at a time</li> </ul> <p><b>Upside-Daisy Cow Lifter</b></p> <ul style="list-style-type: none"> <li>A metal chair to support the rear end with a chisel sled for the front</li> </ul>	<p>Use a suitable lifting device (see Box 7 - Lifting Options)</p> <p>Only lift if it is <b>EFFECTIVE</b> and <b>SUPERVISED</b>:</p> <ul style="list-style-type: none"> <li>Effective lifting means that the cow is able to take some of her weight and stand with the assistance of the device. It does not mean "fringing".</li> <li>Supervised means that the cow is observed regularly during the period of the lift and as soon as she is unable to take her weight she is lowered.</li> </ul> <p>A cow being able to support her weight for an increasing time is a good indicator of recovery.</p> <p><b>CAUTION</b> Over-lifting a cow can be counter-productive.</p> <p>Lifting a cow that is unable to stand effectively and/or fights against the lifting device will cause more harm than good. These cows will have a better chance of recovery if they are NOT lifted, providing they have suitable bedding and are rolled regularly.</p>	<ul style="list-style-type: none"> <li>Dislocated hip</li> <li>Muscle damage</li> <li>Nerve damage</li> <li>Pressure sores</li> <li>Mastitis</li> <li>Swollen and damaged joints</li> <li>Heat stress or hypothermia</li> <li>Pain</li> <li>Depression</li> </ul>	<p>If an "Alert Down" becomes a "Non Alert Down" the prospects for survival are poor and euthanasia is usually required.</p>

